

# YAMAHA MOTOR CORPORATION, U.S.A.

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April 8, 2004

National Highway Traffic Safety Administration Associate Administrator for Enforcement 400 Seventh Street, SW Washington, DC 20590

Subject: 03V-309

Dear Sirs:

Enclosed please find Technical Bulletin M2004-007 which has been sent to our dealers. It is relative to time saving transmission repair tips for the aforementioned recall.

Sincerely,

Michael J. Schmitt Division Manager

# XV1700P/PC (Road Star Warrior)

# Time Saving Transmission Repair Tips



# INTRODUCTION

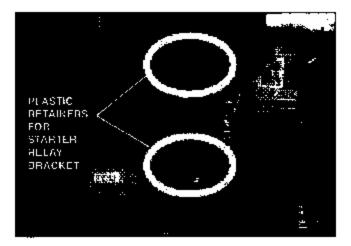
# Transfer Case Removal Tips

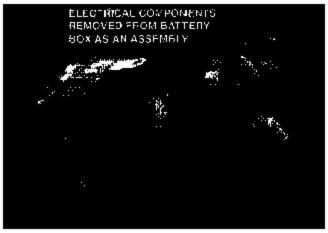
To remove the transfer case as an assembly when performing the recall described in Technical Bulletin M2004-002, you must first remove the battery box and lower ("sub") fuel tank. This is because there is a rubber heat shield on the back side of the transfer case that cannot be removed until the plastic retainer holding it to the frame is removed. The only way to reach this retainer is by removing the battery box and lower fuel tank.

Be sure to refill the transfer case with lubricant when the transmission modification procedure is finished. Verity oil level before reinstalling the muffler to prevent severe engine damage.

#### **Battery Box Removal**

- Disconnect and remove the battery.
- Remove the battery ground cable from the oil filler neck.
- Pull the starter relay up and away from its bracket and remove the two plastic retainers that secure the starter relay bracket to the battery box (see adjacent top photo).
- Remove the plastic tie that secures the main wire harness to the battery box.
- Disconnect the wire connector for the taillight and remove all electrical components from the battery box as an assembly (see adjacent bottom photo).
- Remove the two battery box mounting hex screws, then remove the battery box.





# Lower ("Sub") Fuel Tank Removal

- Remove the drive belt pulley cover, pulley, and rear housing.
- Disconnect the hoses and wire connector from the lower fuel tank.
- Remove the three mounting screws for the lower fuel tank (see the two adjacent photos), then remove the sub fuel tank.

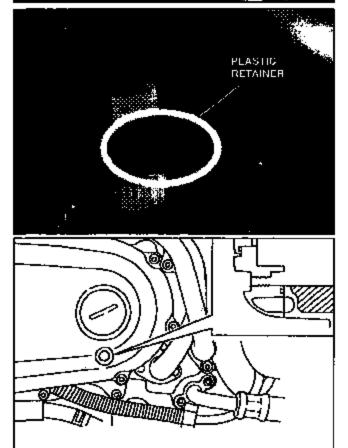




#### Rubber Heat Shield Retainer Removal

 Remove the plastic retainer that attaches the rubber heat shield (on the back of the transfer case) to the bracket on the frame. The transfer case can now be removed following the procedure in the M2004-002 Recall Technical Bulletin.

NOTE: The transfer case has its own oil supply, which is independent from the engine oil supply. Be sure to refill the transfer case with 0.48L (0.52 US qt) of SAE80 API "GL-4" Hypoid gear oil, before installing the exhaust system. Double check the oil level to be sure it is full (see adjacent illustration).



#### Adjustable Engine Mount Tips

When removing or reinstalling the engine, remember the right side, lower front engine mount uses an adjustable collar (spacer bolt) inside the frame. This collar must be loosened prior to engine removal and retightened during engine installation.

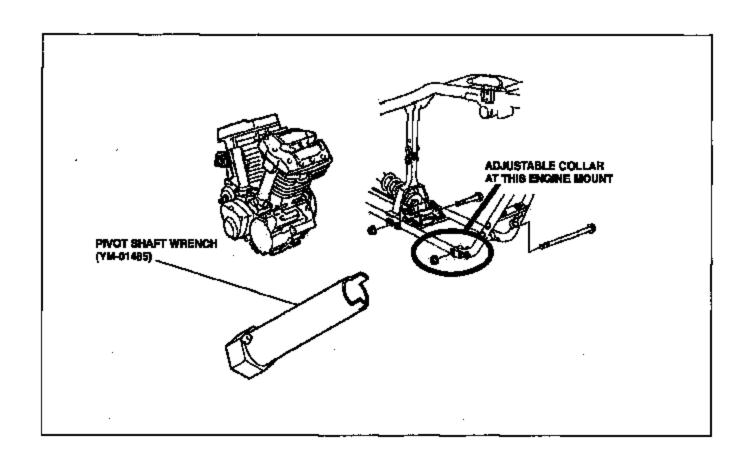
# **During Engine Removal**

- Loosen all engine mount botts, but do not remove the bolts.
- Using the special tool Pivot Shaft Wrench (YM-01485), turn the adjustable collar counterclockwise, loosening the collar away from the engine
- Now remove all the mount bolts.

NOTE: A mount bolt acts as a guide for the Pivot Shaft Wrench, so the bolt must be in place whenever using the wrench to turn the adjustable collar.

# During Engine Installation

- Install the front and rear lower engine mount bolts, but do not tighten the bolts.
- Using the special tool Pivot Shaft Wrench (YM-01485), turn the adjustable collar clockwise and torque it to 18Nm (1.8m-kg, 13 ft-lb)
- 3. Now install all the mount bolts.



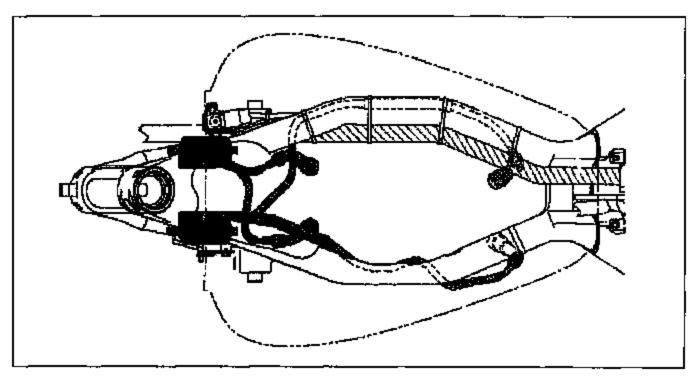
# Linear Control Valve Removal Tips

Removal of the linear control valve mounting screws may appear difficult due to its compact location. However, using a short piece of a ball end 5mm alien driver inserted into a piece of carburetor vent hose will ease the removal of the screws (see adjacent photos).



### Routing of Spark Plug Wires Tips

When reinstalling the ignition coils, use the diagram below to correctly route the wires. If additional routing information is needed, refer to pages 2-38 ~ 2-48 of the XV1700P/PC Service Manual (LIT-11616-15-37).



# XV1700P/PC (Road Star Warrior)

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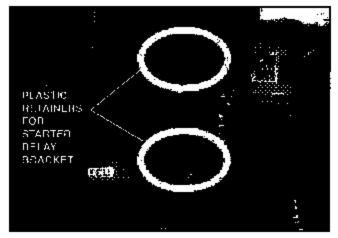
# Transfer Case Removal Tips

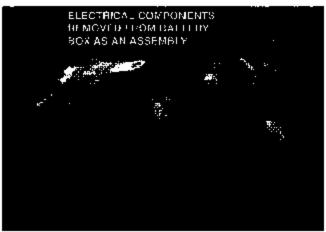
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Be sure to refill the transfer case with lubricant when the transmission modification procedure is finished. Verify oil level before reinstalling the muffler to prevent severe engine damage.

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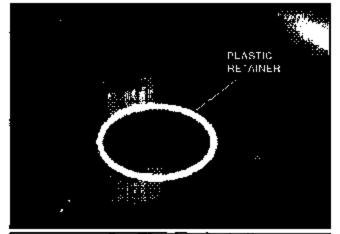


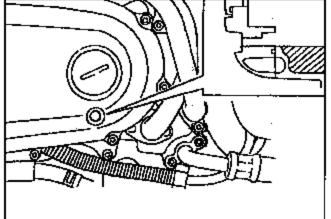
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- Remove the drive belt pulley cover, pulley, and rear housing.
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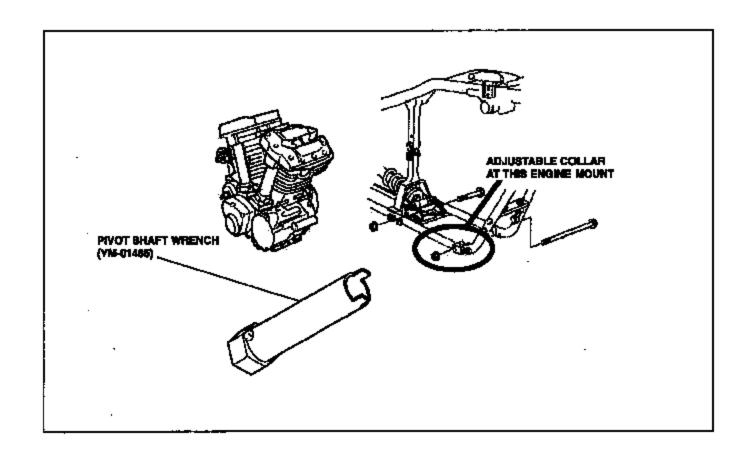
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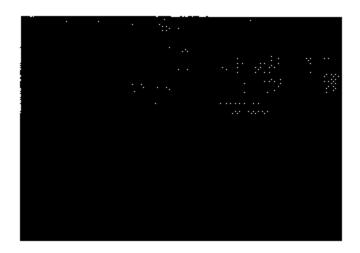
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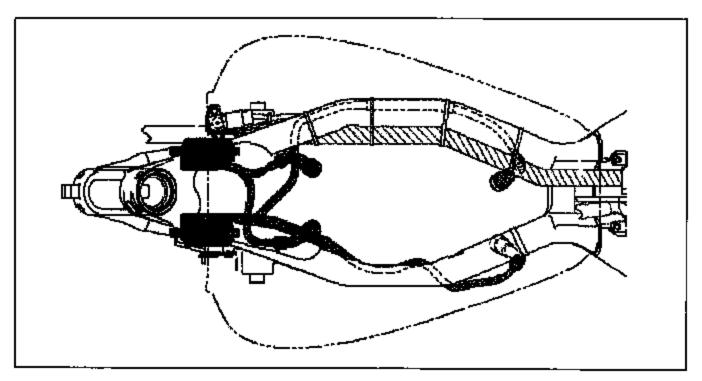
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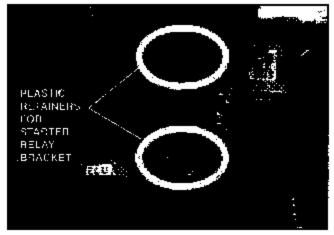
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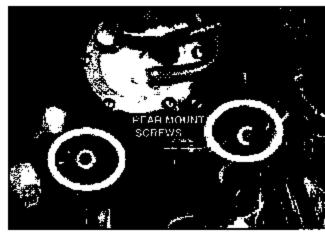
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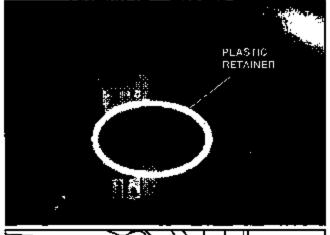


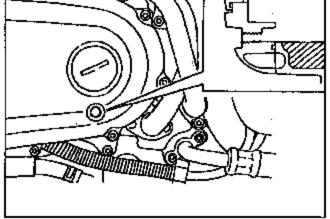
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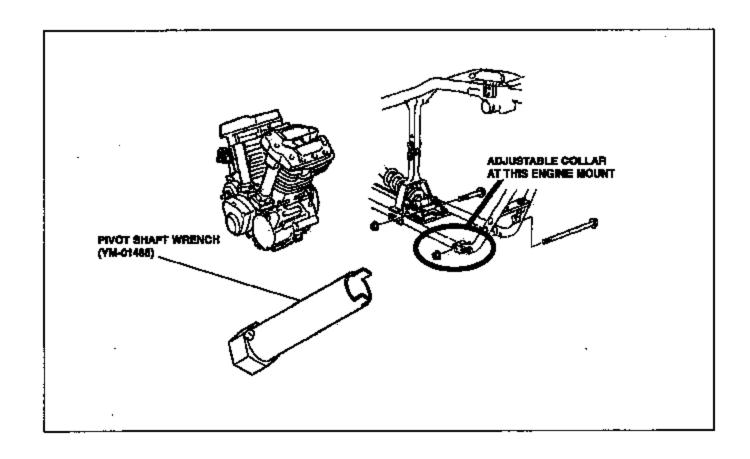
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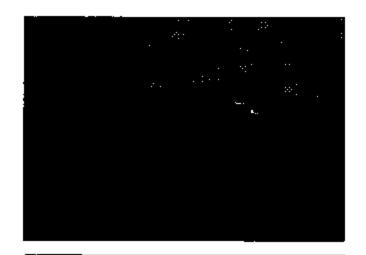
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